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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,508	03/22/2001	Scott Edward Kent	DP-303704	4389
22851	7590	02/07/2005	EXAMINER	
DELPHI TECHNOLOGIES, INC.			LEO, LEONARD R	
M/C 480-410-202			ART UNIT	
PO BOX 5052			PAPER NUMBER	
TROY, MI 48007			3753	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/814,508

Applicant(s)

KENT ET AL. *OK*

Examiner

Leonard R. Leo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

The response filed on November 1, 2005 has been entered. Claims 1-4 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Yu et al.

Kikuchi (Figure 5) discloses all the claimed limitations except turned out feet.

Yu et al discloses a flat heat exchange tube comprising a lower wall 30 and a pair of upper walls 32 with a pair of integral abutted walls 48, 50 and turned out feet 58, 60 respectively for the purpose of increasing the tube strength by ensuring a good braze connection (column 3, lines 30-34).

Since Kikuchi and Yu et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Yu et al would have been recognized in the pertinent art of Kikuchi.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Kikuchi turned out feet for the purpose of increasing the tube strength by ensuring a good braze connection as recognized by Yu et al.

Regarding claims 3-4, the recitation of "coated with braze material" is considered to be a method limitation in an apparatus claim, which bears no patentable weight in this instance. See MPEP 2113. In the final product, the presence of braze material is at the joints.

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi in view of Yu et al as applied to claims 1-2 above, and further in view of Tamura.

The combined teachings of Kikuchi and Yu et al lacks braze material on the inner and outer surfaces of the tube.

Tamura (Figure 1) discloses a flat heat exchange tube comprising a tube wall 7 having braze material 14, 15 on the inner and outer surfaces thereof for the purpose of reducing cost (abstract).

Since Kikuchi and Tamura are both from the same field of endeavor and/or analogous art, the purpose disclosed by Tamura would have been recognized in the pertinent art of Kikuchi.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Kikuchi braze material on the inner and outer surfaces thereof for the purpose of reducing cost as recognized by Tamura.

Regarding claim 4, Tamura (Figure 3) discloses braze material 11 on the outer surface of the tube while the web 9 has braze material on both sides thereof.

Response to Arguments

Applicants' arguments have been fully considered but they are not persuasive. It is unclear how applicants have determined the facts disclosed by Kikuchi, since the drawings and abstract do not support the allegations. Applicants' statements with respect to Kikuchi appear to be mere speculation. As best understood, Kikuchi is concerned with minimizing manufacturing time by employing a single integral corrugated fin, instead of two separate fins 3a, 3b as in the prior art Figures 6-7. Figure 5 of Kikuchi provides improved internal burst strength by joining

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the butted sheet ends 1 to the opposed wall at location 5. The fin corrugations are mainly provided to improve heat exchange by forming discrete passages.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the combination of references, one of ordinary skill in the art would employ in Kikuchi (Figure 5) butted ends 1 with turned out feet for the purpose of increasing the tube strength by ensuring a good braze connection as taught by Yu et al (column 3, lines 30-34).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

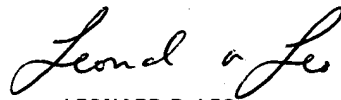
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard R. Leo whose telephone number is (571) 272-4916. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


LEONARD R. LEO
PRIMARY EXAMINER
ART UNIT 3753

February 2, 2005